

**IN THE CLAIMS**

1. (canceled)

2. **(currently amended)** The layer 2 link handler as described in claim 7, wherein said path connection means, switching on a layer 2 packet level, transfers packets that arrive from said ~~permanent virtual connection path of layer 1 connected~~ respective user-side layer 1 PVC path between said network-side device and the one of the plurality of user-side devices to the one specified path ~~of the connection request destination~~.

3. **(currently amended)** The layer 2 link handler as described in claim 7, wherein said path connection means ~~includes a setting means that newly sets one path of the connection request destination specified by said path specification means and connects a path between the user-side device and the specified connection destination~~ said path specification means further includes a setting means that causes the specified path to be connected between the network-side device and the one of the plurality of NSPs.

4. (canceled)

5. **(currently amended)** The layer 2 link handler as described in claim 7, wherein said path connection means ~~recognizes labels of layer 2 packets that arrive from said permanent virtual connection path of layer 1 connected between said network-side device and the user-side device, said labels being assigned for each layer 2 link, and transfers the layer 2 packets to the path to the specified connection destination that corresponds to given labels, and recognizes labels of labeled layer 2 packets that arrive from the path with the specified connection destination and transfers the layer 2 packets to the permanent virtual connection~~

~~path to the user-side device that corresponds to given labels~~said transfer means transfers the  
labeled layer 2 packet to the one specified path according to the label in the labeled layer 2  
packet.

6. (canceled)

7. **(currently amended)** A layer 2 link handler provided in a network-side device, the  
network-side device ~~being connected with~~to each of a plurality of user-side devices by a  
respective user-side layer 1 permanent virtual connection (PVC) path of layer 1, wherein said  
user-side device is made to connect to one among multiple specified connection destinations  
and connected to each of a plurality of network service providers (NSPs) via one of  
~~permanent virtual connection paths of layer 1 or a NSP-side layer 1 PVC path and a layer 1~~  
switched virtual connection ~~paths of layer 1~~(SVC) path, the layer 2 link handler comprising:  
a path specification means that specifies one path ~~of a connection request destination~~  
~~from~~between the network-side device and one of the plurality of NSPs based on layer 2 link  
information that is emitted from one of the plurality of user-side devices at ~~the~~a time of a  
layer 2 link connection request; and

a path connection means that causes said ~~permanent virtual connection path of layer 1~~  
~~connected~~ respective user-side layer 1 PVC path between said network-side device and the  
one of the plurality of user-side devices to connect to the one specified path ~~of the~~  
~~connection request destination~~, wherein

said path connection means includes a labeling means that, based on the layer 2 link  
information emitted from the one of the plurality of user-side devices at the time of ~~a~~the layer  
2 link connection request, assigns a label ~~of each layer 2 link of said connection request to a~~  
to each layer 2 packet from the user-side device, where the label is one of one or more

available label numbers when a label is newly assigned to each layer 2 packet or a different label number when a layer 2 packet is rejected by the one of the plurality of NSPs and is returned to the network-side device because the layer 2 packet is labeled with a same label number as another labeled layer 2 packet, and

said path connection means further includes a transfer means that transfers ~~a~~the labeled layer 2 packet ~~labeled by said labeling means to the one specified path to said specified connection destination;~~

~~—————said labeling means includes a selecting means that, when a label is newly assigned to a layer 2 link, selects an arbitrary available label number and emits a labeled layer 2 packet, and said path connection means handles the link of the labeled layer 2 packet that is assigned the same label number, the link of the labeled layer 2 packet being sent back from the side of the device that received said labeled layer 2 packet, as a link of a pair of said layer 2 link newly assigned a label, and~~

~~—————said labeling means includes an assigning means that newly selects a label number and assigns said label number including in the label a marking indicating that it is a transmission from an allocated label number management side, and handles the link of the labeled layer 2 packet sent back from a reception side with the same label number, to which is added a marking indicating a transmission from the label number non-management side, as a link of the pair of the layer 2 link newly assigned a label.~~

8. **(currently amended)** The layer 2 link handler as described in claim 7, wherein said labeling means, ~~when it newly assigns a label to a layer 2 link, determines the label number by doing a negotiation mutually with another device side~~ assigns the label by negotiating a label number with the plurality of user-side devices and the plurality of NSPs.

9. **(currently amended)** The layer 2 link handler as described in claim 7, wherein

said labeling means, ~~when it newly assigns a label to a layer 2 link,~~ assigns a the label with a ~~label number directed by~~ according to an operation of a network management operation device.

10. **(currently amended)** The layer 2 link handler as described in claim 5, wherein

~~said path connection means recognizes the labels of layer 2 packets that arrive from said permanent virtual connection path of layer 1 connected between said network-side device and the user-side device, said labels being assigned according to the quality of service class of each layer 2 link, and transfers layer 2 packets to the path to the specified connection destination that corresponds to the given label~~ labeling means assigns the label according to a quality-of-service class of the respective user-side layer 1 PVC path between the network-side device and the one of the plurality of user-side devices.

11. **(currently amended)** The layer 2 link handler as described in claim 5, wherein

~~said path connection means recognizes the labels of layer 2 packets that arrive from said permanent virtual connection path of layer 1 connected between said network-side device and the user-side device, said labels being assigned according to the connection destination of each layer 2 link, and transfers layer 2 packets to a path to the specified connection destination that corresponds to the given label~~ labeling means assigns the label according to the one specified path.

12. **(currently amended)** The layer 2 link handler as described in claim 5, wherein

~~said path connection means recognizes labels of layer 2 packets assigned according to the distribution type of service in the IP packet within layer 2 link packets that arrive from said~~

~~permanent virtual connection path of layer 1 connected between said network-side device and the user-side device, and transfers layer 2 packets to the path to a specified connection destination that corresponds to the given label~~labeling means assigns the label according to a type of service requested by the one of the plurality of user-side devices.

13. **(currently amended)** The layer 2 link handler as described in claim 7, wherein said path ~~connection specification means further~~ includes an extracting means that extracts a ~~request connection destination name from the~~ layer 2 link information emitted from the ~~one of the plurality of user-side devices at the time of a~~ the layer 2 link connection request, and a conversion table that converts ~~from said connection destination name to a connection address,~~ and a path determining means that ~~used~~ uses the connection address ~~obtained from said conversion table to cause a path to be connected between the user-side~~ network-side device and a ~~specified connection destination~~ the one of the plurality of NSPs.

14. **(currently amended)** The layer 2 link handler as described in claim 7, wherein ~~processing that specifies one path of the connection request destination from layer 2 link information in said path specification means is done under software control by a processor,~~ and the path connection means ~~that connects said permanent virtual connection path of layer 1 connected between said network-side device and the user-side device to a path specified by said processor after said path is specified, is constituted by a switching means by means of~~ hardware controlled by a switching means.

15. (canceled)